

Title (en)

OPTICAL INSTRUMENT FOR BIOMECHANICAL DIAGNOSIS OF EYE DISEASE

Title (de)

OPTISCHES INSTRUMENT ZUR BIOMECHANISCHEN DIAGNOSE VON AUGENERKRANKUNGEN

Title (fr)

INSTRUMENT OPTIQUE PERMETTANT UN DIAGNOSTIC BIOMÉCANIQUE D'UNE MALADIE OCULAIRE

Publication

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Application

EP 15703761 A 20150202

Priority

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Abstract (en)

[origin: US2016220110A1] A method and system for performing biomechanical diagnosis of eye disease may include a Brillouin light source to generate a Brillouin sample beam, and a second harmonic generation (SHG) light source to generate an SHG sample beam. Both the Brillouin sample beam and the SHG sample beam may be coincidentally directed to a biological tissue sample in a confocal manner to a focus position. Brillouin scattering resulting from the Brillouin sample beam may be detected to determine an elastomechanical property and a viscoelastic property of the sample. SHG scattering resulting from the SHG sample beam may be detected to determine an indication of a morphological structure of the sample. The sample may be an in vivo human cornea.

IPC 8 full level

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